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Safety

**RADIO FREQUENCY (RF) RADIATION AREA
HAZARDS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction is established to advise personnel of the radio frequency (RF) radiation emanating from aircraft and radar simulator test sets on the flightline, the avionics hangar (578), entrance points to hangar 590, and the Avionics Intermediate Shop (AIS) and Electronic Countermeasure Shop (ECM) in bldg 584. It implements AFPD 91-3, *Occupational Safety and Health*. It also references AFOSH STD 161-9, *Exposure to Radio Frequency Radiation*, T.O. 1F-16C-2-OOGV-00-1, *General Vehicle Description*, T.O. 1F-16C-2-94JG-60-2, *Flightline Radar Operational Checkout Procedures*, T.O. 12P3-2ALQ131 22-1 through 22-7, *ECM shop maintenance procedures*, T.O. 33D7-38-184-1, *AIS Test Station Operation*, 11F45-2-16-2, *Dual Mode Transmitter Maintenance*, TR: LCL-419FW 60-7 *Radar Threat Warning System* and *IFF Mode Check Taxiway Checks Checklist*, T.O. 33G7-8-115-1, *Operation and Maintenance Instructions Radar Simulator AN/APM-427*. This instruction is applicable to all personnel and vehicles in the radiation area.

SUMMARY OF REVISIONS

Added paragraph 2.5. pertaining to maintenance on the ECM PODs. Added paragraph 2.6. pertaining to shop maintenance of Line Replaceable Units (LRU). A (I) indicates revisions from the previous edition.

1. Responsibility:

- 1.1. Supervisors. Ensure that assigned personnel are familiar with this instruction and the hazards involved if they enter the radiation area. Supervisor's occupational health responsibilities are defined in AFOSH STD 161-9. Follow standard for medical investigation of accidents and incidents.
- 1.2. Commander. Appoints a unit radiological protection officer (RPO).
- 1.3. Unit Radiological Protection Officer. Responsibilities are defined in AFOSH STD 161-9.
- 1.4. Individual. Responsibilities are defined in AFOSH STD 161-9.

2. General:

2.1. When the F-16 aircraft radar is transmitting:

2.1.1. Radiation hazard cones are positioned at 120 feet in a 120-degree arc in front of the transmitting aircraft.

2.1.2. Radiation hazard zone extends for a distance of 120 feet (personnel), 120 feet (electro-explosive devices), and 120 feet (fueling operations).

2.1.3. Do not perform radar bit checks in maintenance hangars. Hazardous RF radiation can be reflected by the materials used in the insulation batts within the ceilings and doors. The radar on the F-16 radiates for one second at the conclusion of the bit checkout.

2.2. When the radar simulator CW box is being utilized to perform radar threat warning checks:

2.2.1. RF radiation hazard stickers are placed on all test sets.

2.2.2. Radiation hazard zone extends for a distance of one foot in front of simulator.

2.3. When the simulator CW box is not in use, it will be shut off.

2.4. Wing personnel, munitions loading of "electro-explosive devices", and refueling operations are PROHIBITED within the radiation zone. Coordination is accomplished to shutdown radio frequency energy transmission prior to entering designated zone.

2.5. When performing shop maintenance on the ECM POD:

2.5.1. Prior to performing POD maintenance, install Antenna Shield Group, AN/ALM-192.

2.5.2. Adhere to all warning and precautions in applicable T.O.s.

2.6. When performing shop maintenance on Line Replaceable Units:

2.6.1. Adhere to all warning and precautions in applicable T.O.s.

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